

Inequality and social contract

Outreach report

Minimum wage, a measure in favour of a social contract

*How the recent minimum wage increase
has affected social welfare, poverty and
inequality*

Credits

The Social Observatory of "la Caixa" Foundation

**"la Caixa" Banking
Foundation, 2022**
Plaza de Weyler, 3
07001 Palma

ISBN 978-84-9900-313-9
("Inequality and social contract"
collection)

**Coordination of the work, graphic
design and layout:**
Knowledge Sharing Network, SL
KSNET

www.ksnet.eu

Proofreading and translation:
Discobole, SL
www.discobole.eu

"la Caixa" Banking Foundation
does not necessarily identify
with the opinions expressed by
the authors of this publication.

elobservatoriosocial.fundacionlacaixa.org/en

Research and preparation of report

Rafael Granell, EVALPUB, University of
Valencia

Amadeo Fuenmayor, EVALPUB, University
of Valencia

Teresa Savall, EVALPUB, University of
Valencia

Curator of the collection:
Luis Ayala, UNED

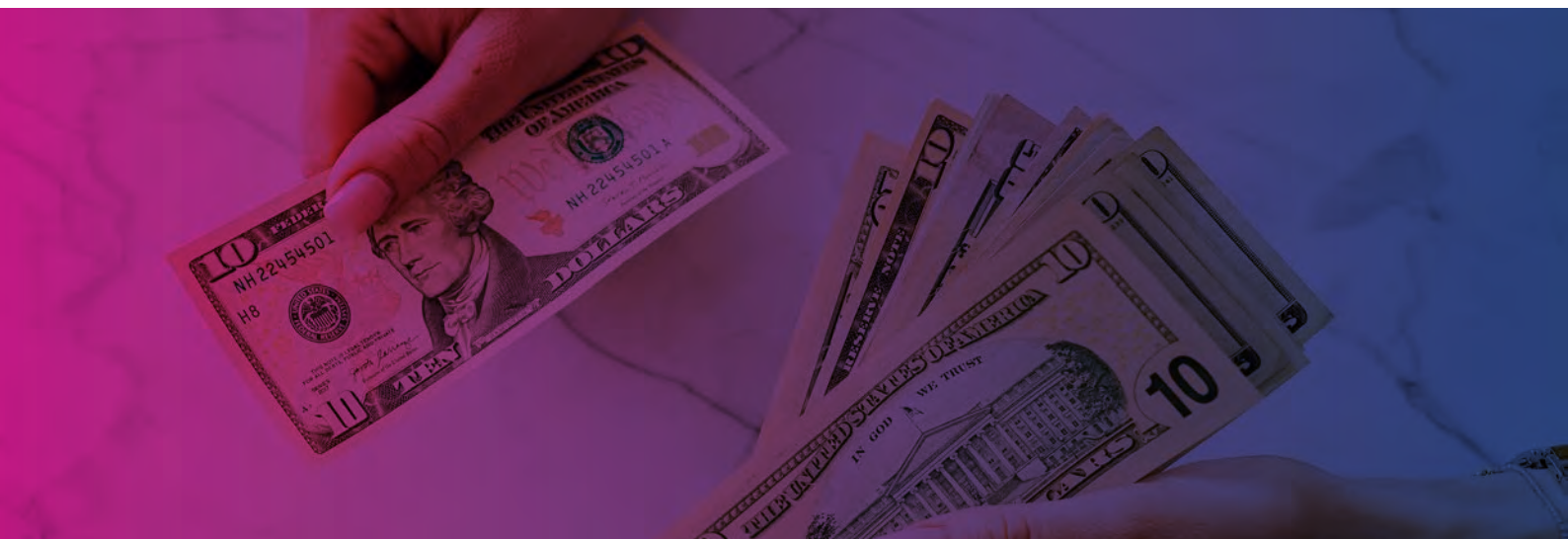
Scientific committee:
Lidia Brun (ULB), Olga Cantó (UAH), Sara de
la Rica (ISEAK), Víctor Lapuente (UG), Marga
León (UAB), Jorge Onrubia (UCM), Leire Salazar
(UNED)

Table of contents

4	Abstract
5	Main ideas
6	The rise of Spain's SMI in 2019 and 2020 was the highest over the past twenty years
7	Spain now has a minimum wage that is higher than the European average
10	The SMI increase benefitted more than 1.6 million salaried workers
11	The minimum wage especially benefits the most disadvantaged groups
15	The increase has reduced wage gaps among different population groups
17	The new SMI has also reduced household poverty, especially among young people
19	Conclusions
20	Proposed actions
21	Study characteristics
22	References

Abstract

A minimum wage is the minimum amount that a salaried worker may receive as remuneration for his or her work. This element has been a focus of discussion not only in economic science, but also in the political, legal and social spheres ever since its origins, beginning in New Zealand and Australia in the late 19th century. Its main goal was to fight against clandestine industries that used female and child labour at very low wages, although over time it has become an element to guarantee the financial self-sufficiency of workers regardless of their gender or age. In terms of Spain's minimum interprofessional wage (SMI), this increased by 29.1% to 950 euros per month in the period 2019-2020. This has been the highest increase over the past 20 years and places Spain above the European average. The increase has had a major positive impact on social welfare by targeting the most precarious workers. Nonetheless, further increases will have to be assessed in terms of their effects on the labour market, especially in the aftermath of covid-19.



Main ideas

1

The rise of Spain's SMI in 2019 and 2020 has been the highest over the past twenty years, with a combined increase of close to 30%.

3

The increase has benefitted 1,631,000 salaried workers, 9.6% of the total. The wage increase was equivalent to an increase in disposable income of 77 euros per month for these workers.

5

The increase has reduced wage gaps by gender, country of origin or age, as well as also reducing wage inequality among employed persons and disposable income inequality among Spanish households.

2

Thanks to these increases, Spain now has an SMI that is higher than the European average, both in terms of purchasing power parity and in terms of the average wage.

4

The groups benefitting most in terms of wages have been employed persons without higher education. According to sector, the increase has had a particular impact on agriculture, hospitality and commerce. According to demographic profile, foreigners, young people and women have benefitted the most.

6

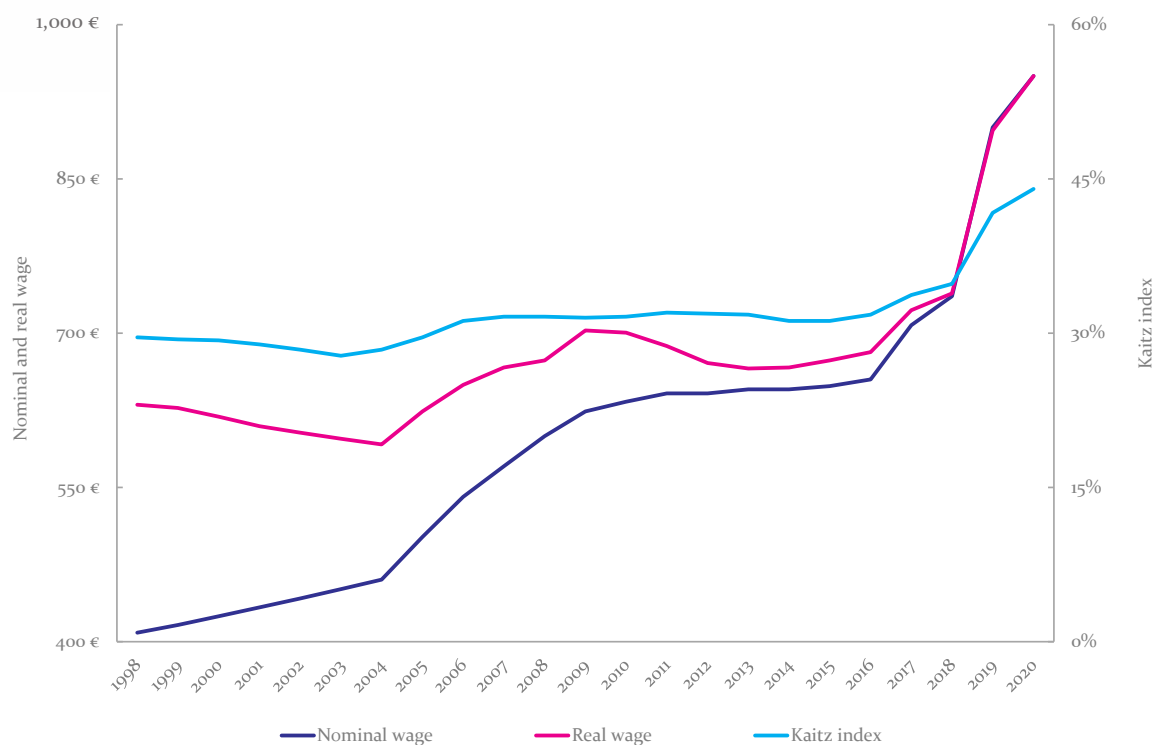
Spain's new SMI has reduced monetary poverty among households, particularly impacting young people. More than 250,000 people, including 121,000 under 30, have been lifted out of poverty.

1 The rise of Spain's SMI in 2019 and 2020 was the highest over the past twenty years

Spain's SMI has been gradually increasing from 1998 until today, in terms of both its nominal value (wage actually paid) and real value (resultant wage after deducting the effects of inflation from its nominal value). The Kaitz index, i.e. the percentage that a minimum wage represents of the average wage, has also increased. Nonetheless, its evolution has not been constant, and four different periods can be distinguished.

Figure 1: SMI increase in 2019 and 2020 was the highest since 1998

Nominal wage, real wage and Kaitz index, 1998-2020



Note: Kaitz index is equal to SMI / average wage. Real wage is based on 2020.

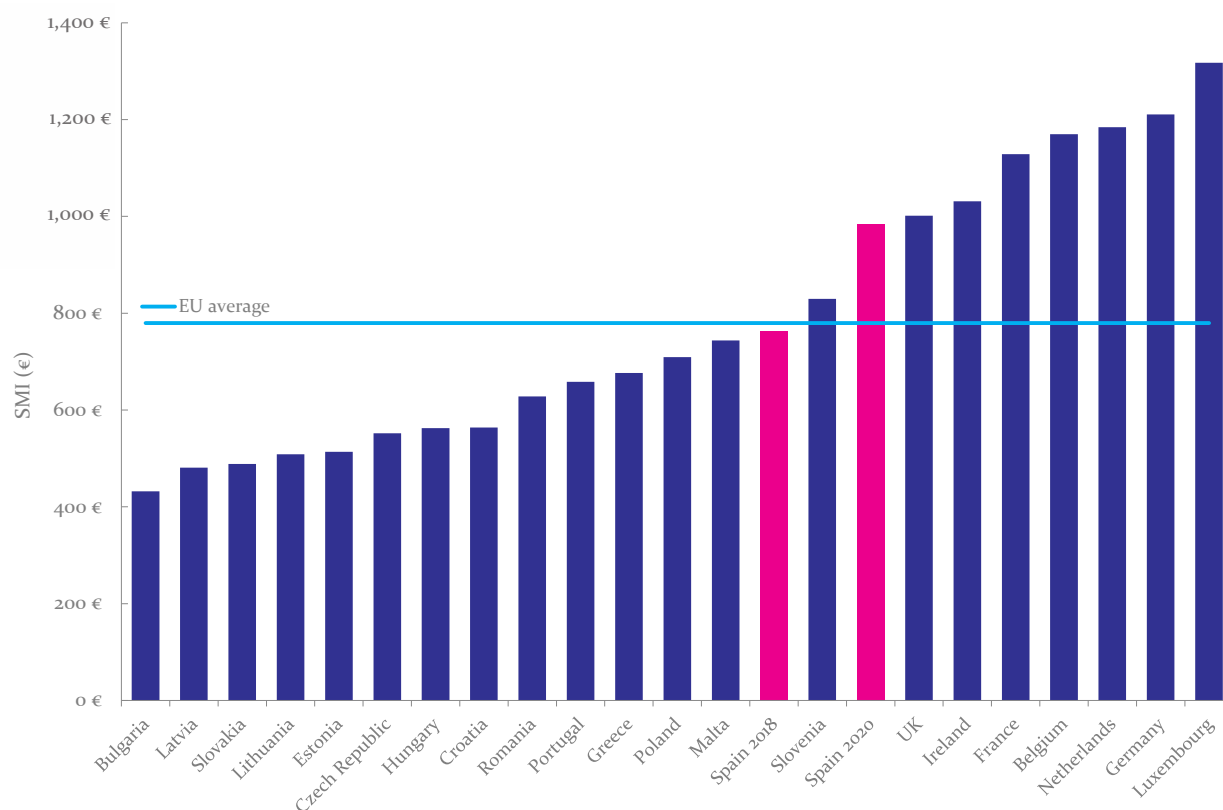
Source: compiled by the authors based on OECD statistics.

The first period, up to 2004, is characterised by wage moderation in order to control inflation. The SMI increased, but below both the price level – so that its real value decreased – and the average wage. In the second period, between 2005 and 2008, the minimum wage rose more than expected inflation and maintained an almost constant relationship with the average wage. The beginning of the third period coincides with the Great Recession. The minimum wage remained stable at around 650 euros per month, thereby decreasing in real terms, although the Kaitz index remained stable. The last period coincides with the exit from the economic crisis. The SMI increased by 8% in 2017 and by 4% in 2018. But it was between 2019 and 2020 that the SMI recorded its highest increase and reached 950 euros per month, representing a rise of 29.1% in just two years. This increase emerges clearly in the time series, not only in nominal terms but also in real terms, and it has put the SMI clearly above 40% of the average wage. No consensus exists on the role of the minimum wage in the economy and its effects on the labour market. According to data provided by Spain's "Labour Force Survey", the sharp rise in the minimum wage in 2019 (22.3%) was not accompanied by substantial job destruction in the country. On the contrary, the number of employed persons continued to grow at a similar pace as in previous years, and the unemployment rate also declined. Not many conclusions can be drawn for 2020 because of the huge number of job losses caused by covid-19.

2 Spain now has a minimum wage that is higher than the European average

Minimum wage fixing is standard practice in many countries throughout the world, including most EU countries. Only six have not yet set a minimum wage: Sweden, Finland, Denmark, Austria, Italy and Cyprus. In order to compare Spain's with that of the other 21 EU countries, the situation in 2018 and the situation that would have existed if Spain had applied the increases corresponding to 2019 and 2020 in that year are taken into account. Measured according to purchasing power parity, the SMI in Spain in 2018 was slightly below the European average (779.72 euros per month). However, the sharp rise in the SMI in 2019 and 2020 would put Spain clearly above this.

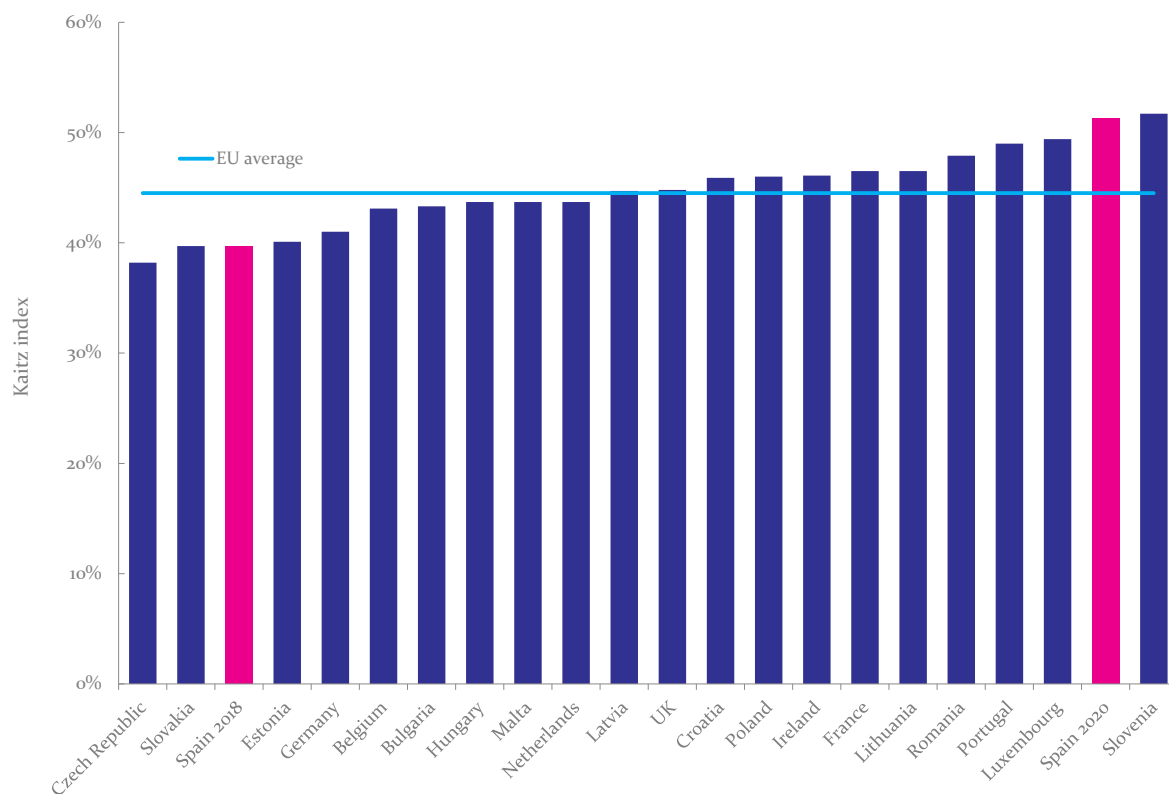
Figure 2: Spain's SMI ranks among the highest in the EU
SMI measured in purchasing power parity by EU country, 2018



Source: compiled by the authors based on Eurostat data.

Another way of comparing the situation in Spain with that of the rest of Europe is by means of the Kaitz index. In this case, the variations among European countries are much less marked, ranging from 38.2% in the Czech Republic to 51.7% in Slovenia. Spain was third from the bottom in Europe in 2018, with a minimum wage representing 39.7% of the average wage in the country. However, the situation in Spain would have changed substantially if it had applied the SMI approved for 2020, and the country would have risen to second place in Europe, only behind Slovenia.

Figure 3: Spain's SMI is the second highest in relation to the average wage in the country
Kaitz index by EU country, 2018



Source: compiled by the authors based on Eurostat data.

3 The SMI increase benefitted more than 1.6 million salaried workers

The increase in the monthly SMI from 735.90 to 900 euros in 2019 improved the situation of 1,192,482 workers whose full-time salary was between these two amounts. These workers, who accounted for 7% of employed workers, saw their wages increase by an average of 67.54 euros. The number of those benefitting from the increase of the SMI to 950 euros per month in 2020 was even higher. All workers who earned higher wages in 2019 did so again in 2020, to which must be added 438,572 employees who had a wage of between 900 and 950 euros, making a total of 1,631,054 people. They represent 9.6% of all employees, with an average wage increase of 39.56 euros. If we add up the average wage gain of these workers over the two years, the figure is 88.94 euros per month, more than 8% of their income. Wage increases lead to an average increase in market income (comprising labour and capital income) of 88.94 euros per month, but they also have an effect on benefits received and taxes paid. First, workers who receive the minimum wage will see an increase in their unemployment benefits during the periods when they are not working, because they will have paid a higher amount of social security contributions. The remaining public benefits will be slightly reduced, as some of these, such as minimum complements or family allowances, will fall as the income obtained increases. Second, many of these workers will have to pay a higher amount of income tax and social security contributions because they now earn a higher wage. In any case, the final effect on the disposable income of workers is still positive, albeit smaller, at 76.62 euros per month.

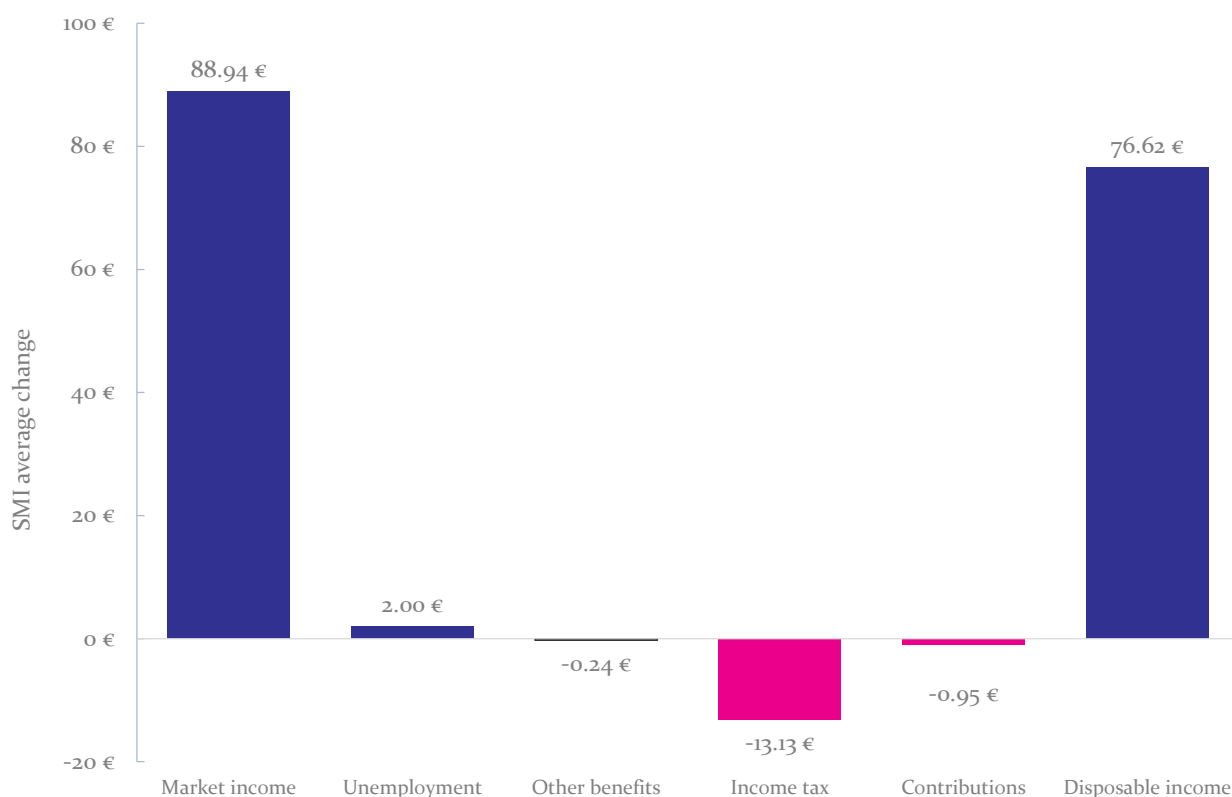
Table 1: Workers benefitting from SMI increase

	No. workers	% workers	Average wage increase
2019	1,192,482	7.0%	67.54 €
2020	1,631,054	9.6%	39.56 €
TOTAL	1,631,054	9.6%	88.94 €

Source: compiled by the authors using EUROMOD.

Figure 4: Spain's new SMI has increased the disposable income of workers

Average change in the SMI on benefits, taxes and disposable income, 2018-2020



Source: compiled by the authors based on data from the "Labour Force Survey (EPA)", INE.

4

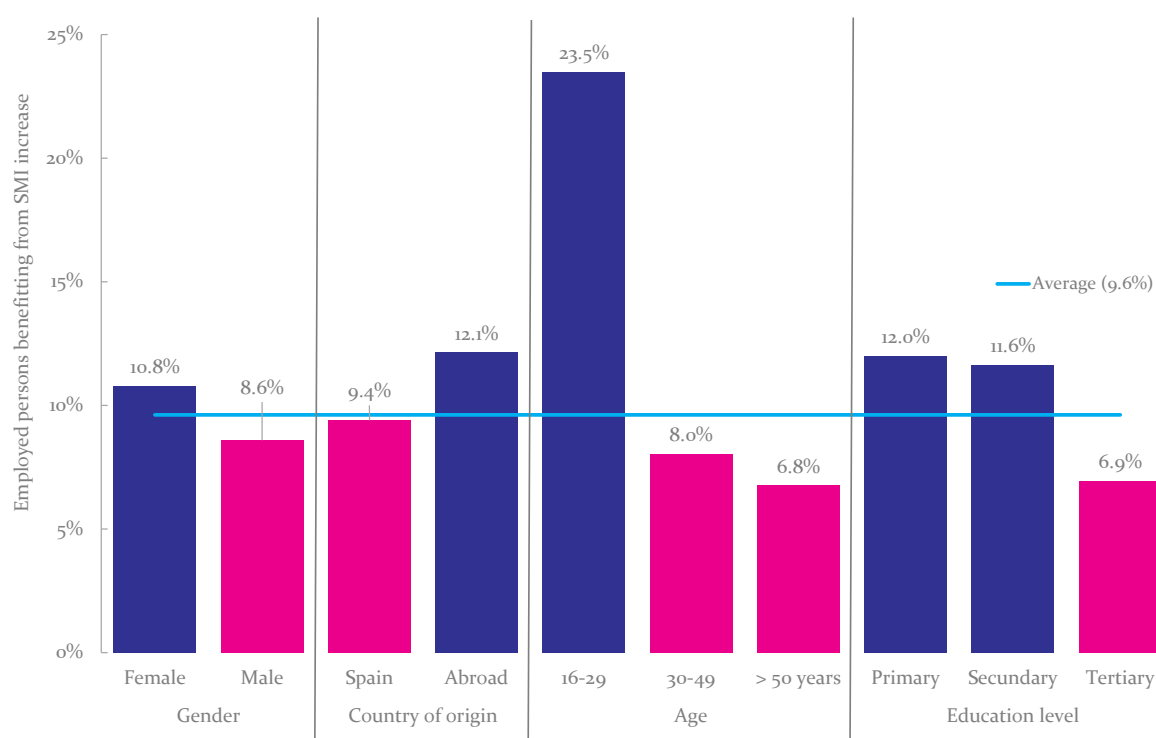
The minimum wage especially benefits the most disadvantaged groups

Certain groups have benefitted more from SMI increases because they have lower wages. It is women who have benefitted the most if we divide workers by gender. Some 10.8% have seen their wages increase, compared to 8.6% of men. Country of origin is also an important variable, as a higher percentage of foreign workers (12.1%) than Spanish workers (9.4%) have benefitted from this wage increase. The most important difference can be observed when we divide workers by age bracket. The youngest workers are the main beneficiaries of the SMI increase, as almost a quarter of workers under 30 years of age (23.5%) now earn a higher wage as a result of this measure.

The effect is not as significant in higher age brackets, with the proportion of those benefitting falling to 8% among 30-49 year olds and 6.8% for those older than 50. Finally, education levels also play an important role. It has a greater positive impact on employees with no higher education, while only 6.9% of those with higher education benefit. The results have also been obtained by cross-referencing the variables of gender, age and country of origin to ascertain if there is a specific group that is more likely to improve its situation with the SMI increase. Young women (aged between 16 and 29) benefit greatly from this measure, affecting 22.6% of female workers. Foreign women are also above average, as the measure benefits 11.6% of foreign women workers. Finally, among women who meet both conditions, being young and foreign, 15.4% benefit from the SMI increase, a much higher figure than the overall average (9.6 %).

Figure 5: Benefits from the SMI increase are unequal

Employed persons benefitting from the SMI increase by gender, country of origin, age and educational attainment, 2020

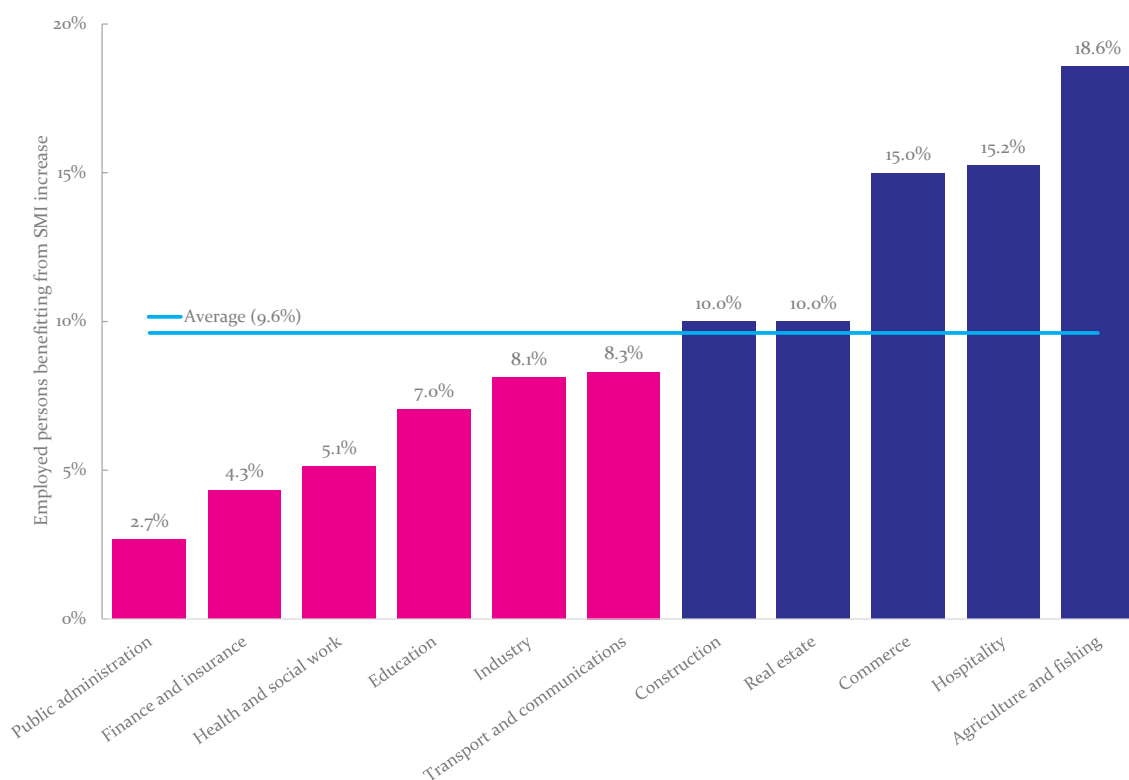


Source: compiled by the authors using EUROMOD.

In terms of different types of work, the SMI increase does not have an equal impact on all types of work, as precarious employment is more concentrated in certain economic sectors. The measure has a very limited effect for public workers, who in very few cases were below the 950 euros per month of the new SMI. There are other service sectors where it is also relatively unusual to be below the current minimum wage, such as finance, insurance, health, social work and education. The industrial, transport and communications sectors have a higher percentage of workers benefitting from the SMI increase, but also below the average. The situation is different for construction and real estate activities, which are slightly above average. But there are basically three sectors that have been most affected by the new SMI: commerce, hospitality, agriculture and fishing. In the first two, approximately 15% of workers will have a higher income thanks to the new minimum wage, while in the third this figure rises to 18.6%. Young workers with less training and a high degree of temporary employment are concentrated in these three sectors. There is also a much higher proportion of women in commerce and hospitality than in the rest of the labour market.

Figure 6: The commerce, hospitality, agriculture and fishing sectors are those that have benefitted most from the SMI increase

Employed persons benefitting from the SMI increase by economic sector, 2020

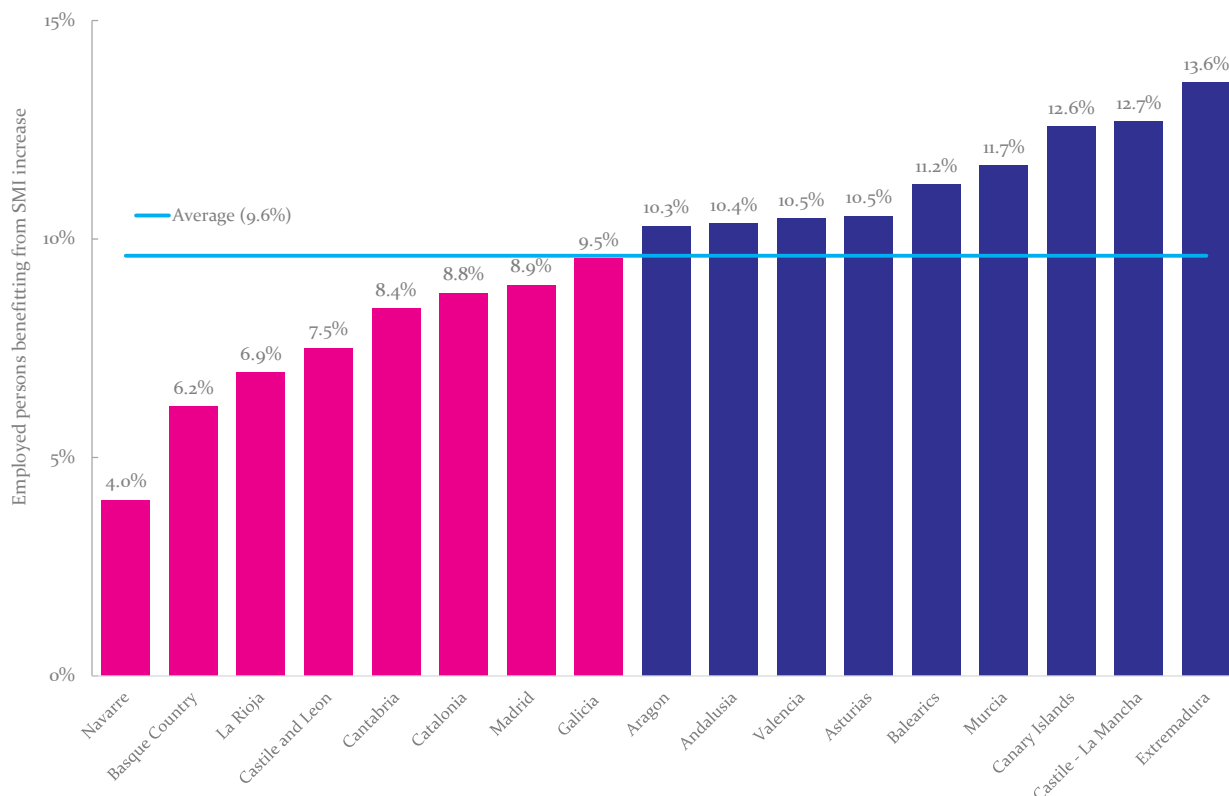


Source: compiled by the authors using EUROMOD.

The situation is also very different depending on each autonomous community, with some having a higher proportion of workers covered by the minimum wage. A negative relationship can be seen between regional per capita income and the percentage of those benefitting from the SMI increase. For example, the Basque Country and Navarre, the second and third Spanish regions with the highest GDP per capita, have the lowest number of workers below 950 euros. On the other hand, Spanish regions with lower incomes, such as Extremadura and Castile – La Mancha, are the ones that benefit most from the new SMI. Nonetheless, not everything is explained by regional income, as the population and productive structure of each community also generates differences. For example, there is a high percentage of workers who have benefitted from the increase in the minimum wage in those autonomous communities where the commerce and hospitality sectors are more important, such as the Balearic and Canary Islands.

Figure 7: An inverse relationship exists between regional per capita income and the scope of the SMI

Employed persons benefitting from the SMI increase by autonomous community, 2020



Source: compiled by the authors using EUROMOD.

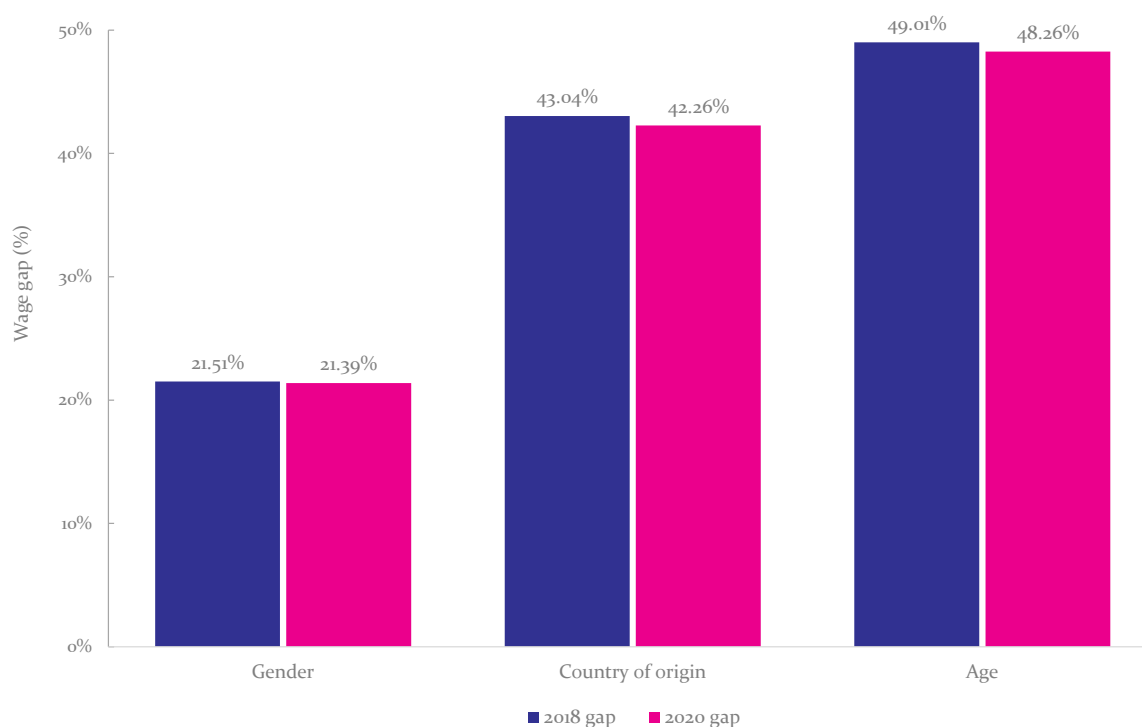
A territorial analysis was also conducted by taking into account the degree of urbanisation of the geographical area in which the workers live. It has found that the SMI increase has had a greater effect on workers living in sparsely populated areas (11.1%). This percentage is almost at the national average (9.7%) in intermediate areas, with a population density of more than 100 inhabitants/km², while the percentage of beneficiaries falls to 8.9% in highly populated areas, with a population density of more than 500 inhabitants/km².

5 The increase has reduced wage gaps among different population groups

The labour market generates significant wage differences among different groups. These differences are often quantified by the so-called “wage gap”. The SMI increase in 2019 and 2020 increased the wages of the lowest paid workers, and therefore benefitted to a greater extent the groups with the highest presence in this category: women, people born abroad and young people. It is therefore logical to expect a reduction in the gender, country of origin and age pay gap. The first fell from 21.51% in 2018 to 21.39% in 2020, the second from 43.04% to 42.26%, and the third from 49.01% to 48.26%. The narrowing of these gaps is an additional positive effect of the SMI, although its modest amount makes it clear that additional measures are required.

Figure 8: Wage gaps become narrower with SMI increases

Wage gap by gender, country of origin and age, 2018 vs. 2020



Source: compiled by the authors using EUROMOD.

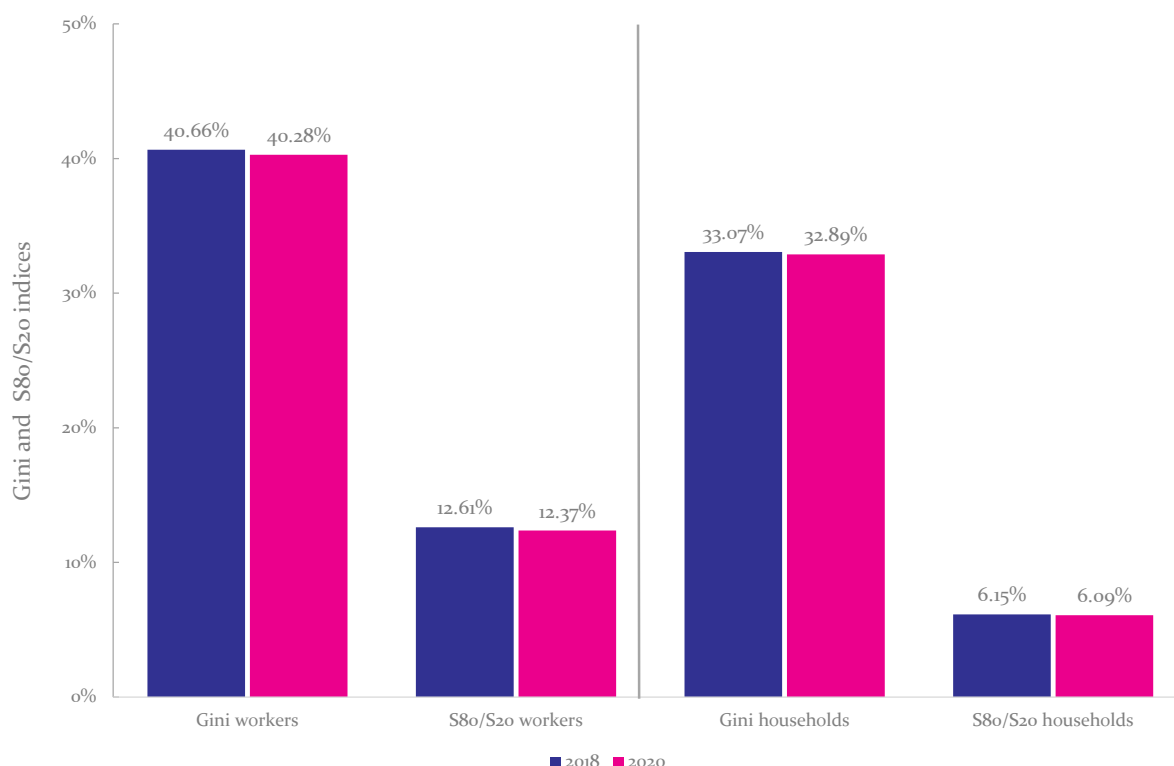
Another aspect worthy of attention is the effect that the SMI has on income distribution inequality. This is calculated using the Gini and S80/S20 indices, dividing the income of the top 20% by the income of the bottom 20%. Both indices display a higher value the higher the inequality.

Evidence shows that the recent SMI increase has led to a reduction in the Gini index from 40.66% to 40.28%, implying an improvement in redistribution of 0.9%. This reduction is concentrated at the extremes, as can be seen by dividing the wages of the top 20% of earners by the wages of the bottom 20% (the so-called "S80/S20 index"). The value of this index therefore fell from 12.61 to 12.37 between 2018 and 2020, indicating a decrease in the wage gap between the two by 1.9%.

But the SMI increase has an impact not only on wage inequality, but also on the disposable income ultimately received by households. Whether the Gini or S80/S20 index is used, it can be seen that the SMI leads to a more egalitarian situation.

Figure 9: Inequality decreases as the SMI rises

Gini and S80/S20 indices of workers and households, 2018 vs. 2020



Note: the S80/S20 index is calculated by dividing the income of the top 20% by the income of the bottom 20%.

Source: compiled by the authors using EUROMOD.

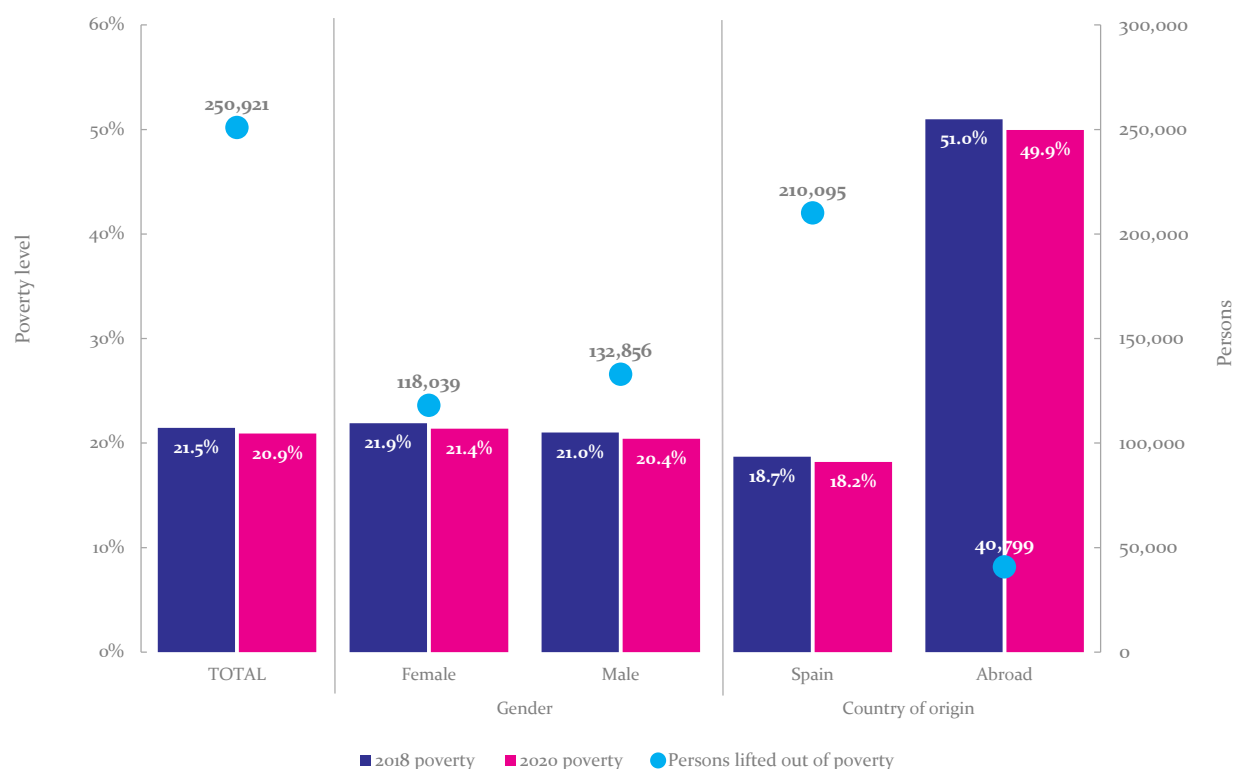
6

The new SMI has also reduced household poverty, especially among young people

The SMI increase also has an impact on the poverty level in Spanish society. The threshold has been tied to the 2018 value in order to compare poverty in two different periods. First, it can be seen that the SMI has had a relatively large impact on total poverty. The percentage of people considered poor in Spain fell from 21.5% to 20.9%, a value that is equivalent to more than 250,000 people. The differences are very small when divided according to gender, as the poverty level is very similar between men and women. More striking are the differences between people who were born in Spain and those born abroad. The latter start from a much higher poverty level (51%), which would be slightly below 50% (49.9%) thanks to the SMI increase.

Figure 10: Poverty decreases as the SMI increases

Poverty level by gender and country of origin, 2018 vs. 2020

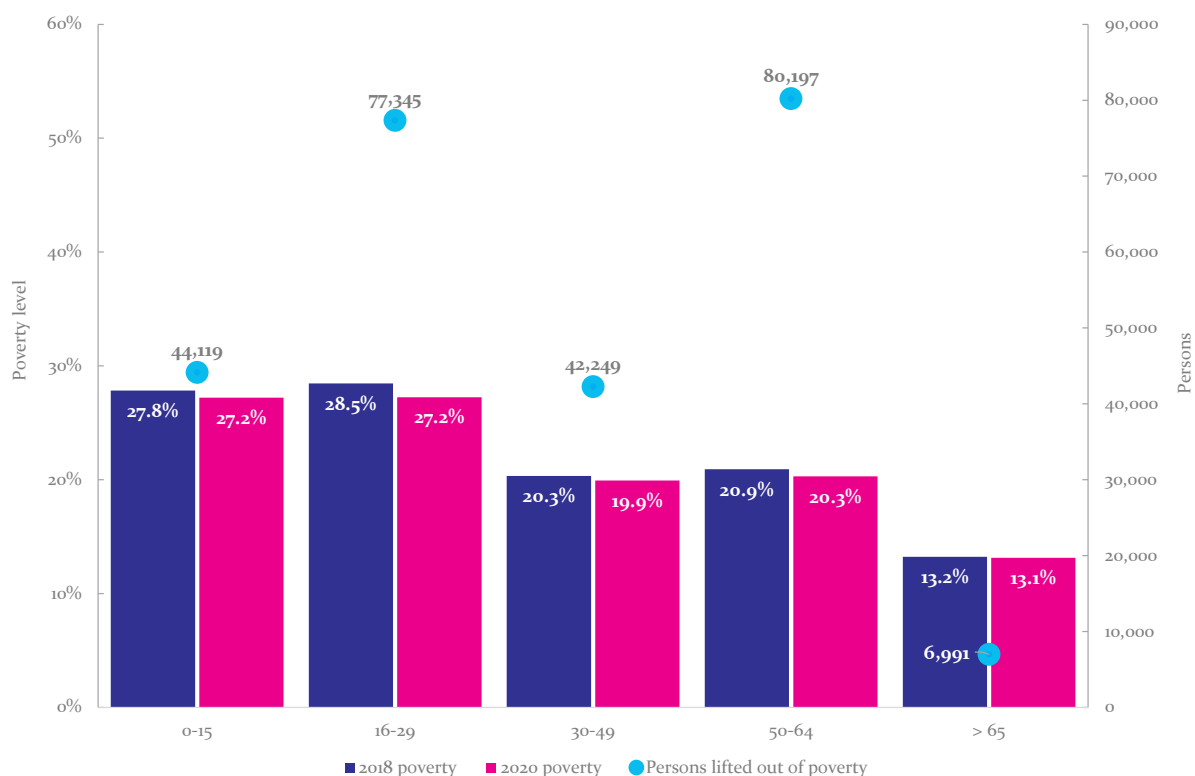


Source: compiled by the authors using EUROMOD.

The starting point is very different according to age. The people in the most precarious situation in 2018 were the youngest, both those under 16 and those in the 16-29 age bracket. The effect of the SMI is positive in reducing poverty for all age groups, but particularly so among young people who are able to enter the labour market, i.e. those aged 16-29. Their poverty level fell from 28.5% to 27.2% over the two years, which means 77,345 fewer poor young people. However, the biggest beneficiaries in absolute terms are those aged 50-64, as the number of active workers is much higher in this age bracket. A total of 80,197 people in this group have been lifted out of poverty thanks to the new SMI.

Figure 11: Poverty reduction is higher among young people

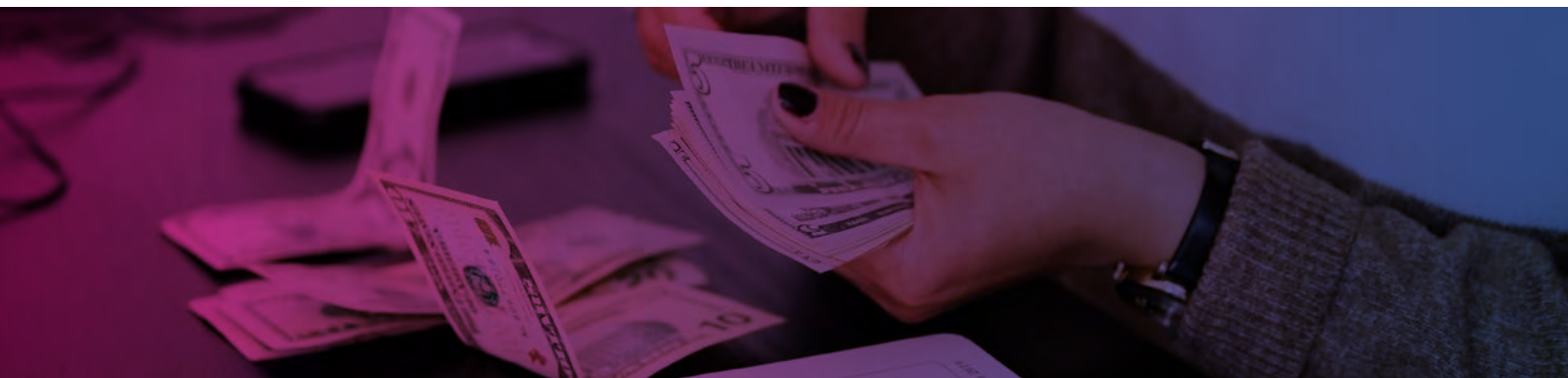
Poverty level by age, 2018 vs. 2020



Source: compiled by the authors using EUROMOD.

Conclusions

The SMI has been increasing in nominal terms ever since it was introduced in 1963. But its increases in 2019 and 2020, the largest in its history, have placed Spain among the European countries with the highest minimum wage. These increases have benefitted salaried workers who were in a more precarious situation, especially women, young people and foreigners. They have also contributed to reducing wage gaps, inequality levels and poverty, again especially among young people. It should be ensured that the purchasing power of the lowest paid workers is maintained and/or that the SMI is indexed to the average wage in order to guarantee that these improvements in welfare are extended into the future. Nonetheless, it is important that future SMI increases are assessed in relation to their effect on labour supply and demand, especially in the new context introduced by the pandemic.



Proposed actions

1

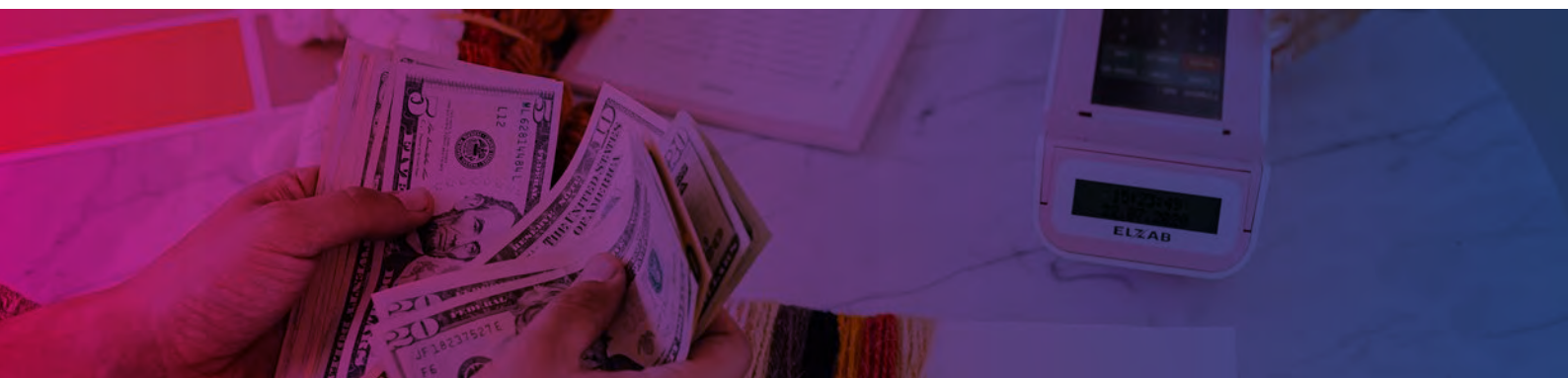
Guarantee that the SMI is gradually adjusted so as to maintain the purchasing power of the lowest paid workers and/or to maintain it at the same percentage of the average wage.

2

Ensure that the public sector undertakes future increases in disposable income through measures such as wage top-ups or lower taxes and social contributions for lower paid workers.

3

Tackle inequality and severe poverty for those who cannot access the labour market – and therefore fall outside SMI coverage – through mechanisms such as universal basic income.



Study characteristics

This paper explores how the increase of Spain's SMI has affected poverty and inequality in the country. However, the outbreak of the covid-19 pandemic coincided with the SMI increase in 2020 and is having devastating effects on the labour market. Separating the two issues is very difficult with the data currently available, so the results presented in this paper should be understood as those that would have been produced in the absence of the pandemic. We have also not considered the knock-on effects that may be caused by the rise in the SMI when collective bargaining agreements are reached on higher wages for workers that are relatively similar to the new SMI (if this happens at all). Likewise, measuring changes in the behaviour of individuals after the introduction of the measure requires up-to-date socio-economic and labour market information. Finally, there is no consensus on the role of the minimum wage in the economy and its effects on the labour market. One possibility is that the sharp increase in the minimum wage leads to a significant increase in unemployment; another is that its effect on employment is minor and that, in any case, it is offset by an improvement in the distribution of wages and disposable income. The case of Spain apparently followed the latter pattern during the SMI increase in 2019.

EUROMOD, a tax-benefit microsimulation model of the European Union, has been used to calculate the number of workers who have benefitted from the SMI increase and to analyse its effects on poverty and inequality. The starting point is the socio-economic situation of households in 2019, and the monthly SMI for 2018, 2019 and 2020 (736, 900 and 950 euros, respectively) is varied, maintaining all other socio-economic variables constant. The goal is to ascertain what situation workers would have been in 2019 if they had earned the SMI of each of these three years.

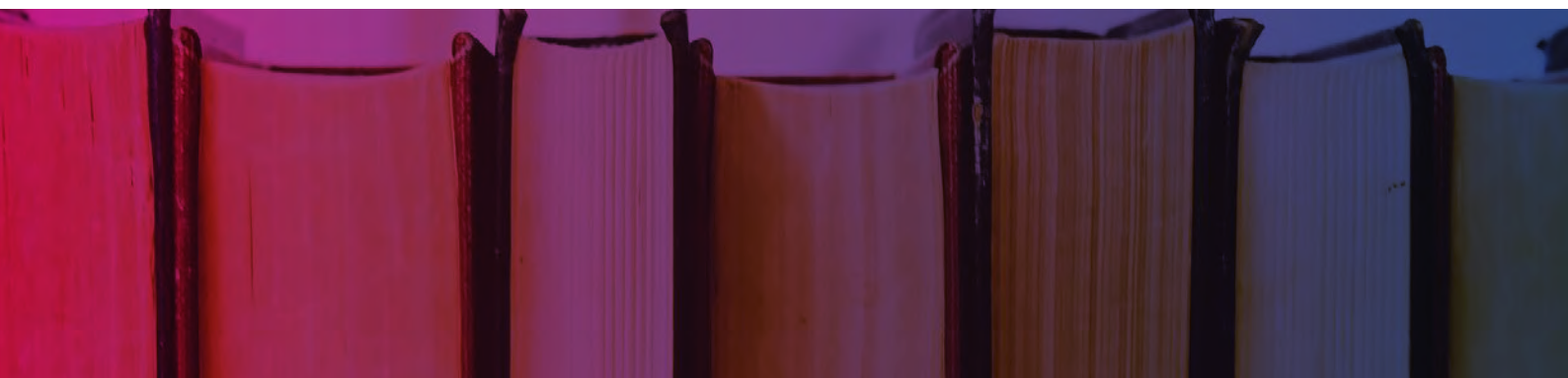


References

Banyuls, J.; Cano, E. and Aguado, E. (2011). "La incidencia del salario mínimo interprofesional en sectores de bajos salarios". In: *Cuadernos de Relaciones Laborales*, 29(2), 363-389, https://doi.org/10.5209/rev_CRLA.2011.v29.n2.38020.

Brown, C.; Girroy, C. and Kohen, A. (1982). "The Effect of the Minimum Wage on Employment and Unemployment". In: *Journal of Economic Literature*, XX, 487-528.

Sutherland, H. and Figari, F. (2013). "EUROMOD: The European Union tax-benefit microsimulation model". In: *International Journal of Microsimulation*, 6(1), 4-26. DOI: 10.34196/IJM.00075.





"la Caixa" Foundation